Development Fee Update

Infrastructure Improvements Plan Fire Facilities

Public Report

Review Draft

Prepared by:

Curtis Lueck & Associates
Tucson, AZ

In collaboration with Psomas Norris Design

May 1, 2014



TABLE OF CONTENTS

INTRODUCT	ION	1
Fire Faci	lities, Defined	1
City-Wid	e Service Area	2
	ology	
•	onate Share, Residential and Non-Residential Development	
	ial Fee Rate	
	Non-Residential Fee Rate	
	PUBLIC SERVICES – EXISTING NEEDS	
	Valuation	
	djusted Facilities Valuation	
	ities Valuation E COST PER UNIT	
	FEE COLLECTION, 2014 – 2024	
	PUBLIC SERVICES – NEW DEVELOPMENT	
	REVENUES AND COSTS	
	DNSIDERATIONS	
	<u>LIST OF EXHIBITS</u>	
Exhibit 1	Fire Facilities Service Area	3
Exhibit 2	Calls by Land Use (Residential/Non-Residential)	5
Exhibit 3	Existing Fire Inventory and Replacement Value – Buildings and Land	7
Exhibit 4	Existing Fire Inventory and Replacement Value – Vehicles	8
Exhibit 5	Existing Fire Inventory and Replacement Value – Equipment	9
Exhibit 6	Net Facilities Valuation	10
Exhibit 7	Cost per Unit: Residential and Non-Residential Uses	12
Exhibit 8	Existing and Proposed Development Fees	12
Exhibit 9	Projected Fire Fee Revenues, 2014 – 2024, Projected Number of New Units	13
Exhibit 10	Projected Fire Fee Revenues, 2014 – 2024, Projected Number of New SUs	
Exhibit 11	Fire Service Unit Multipliers	14
Exhibit 12	Ten-Year Capital Improvement Plan, Development Fees – Fire	16
Exhibit 13	Projected Revenues and Costs	17

Appendix

List of Preparers
Key Contributors, Fire Infrastructure IIP

■ INTRODUCTION

The City of Tucson collects development fees to offset some of the infrastructure costs associated with growth. The City currently charges fees for four public service categories: street facilities, parks and recreational facilities, fire and police. In order to continue assessing and collecting the fees, the City must comply with Arizona Revised Statute ARS §9-463.05, as amended. Consequently, the City is preparing new development fee studies, project lists, fee schedules, and a City ordinance.

The statute codifies Senate Bill 1525, and includes major changes in development fee assessment procedures and programs. It also provides greater specificity regarding the types of "necessary public services" that can be funded with development fees. Prior to calculating the fees, two studies must be prepared: a land use assumptions report, and an infrastructure improvements plan (IIP) for each fee category. As defined in ARS §9-463.05(T)(5), "Infrastructure improvements plan' means a written plan that identifies each necessary public service or facility expansion that is proposed to be the subject of a development fee and otherwise complies with the requirements of this section, and may be the municipality's capital improvements plan."

This report identifies the infrastructure needs for fire facilities for a 10-year planning horizon, and provides preliminary fees needed to fund those facilities. The infrastructure needs are based on land use assumptions provided in a companion document. The land use assumptions were used to estimate the amount of new development projected to occur between 2014 and 2024. The amount and type of fire infrastructure needed to serve that new development was estimated assuming the same level of fire facilities service as is provided to existing development in the City. The preliminary fees provided herein to fund the needed infrastructure will be finalized in a subsequent fee study.

Fire Facilities - Defined

The statute identifies what the fees may be used for primarily by stating what they <u>cannot</u> be used for. ARS §9-463.05(B)(5)(b), which identifies fee requirements, states that "Development Fees may not be used for any of the following: repair, operation or maintenance of existing or new necessary public services or facility expansions."

Further, ARS §9- 463.05(T)(7)(f) defines the "necessary public services", i.e., the facilities and assets which can be included in the Fire IIP, as follows: "[F]ire and police facilities, including all appurtenances, equipment and vehicles. Fire and police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation." Also, all facilities for which development fees are collected must have a direct benefit (i.e. a, "nexus") to the new development for which fees are assessed, as indicated below.

City-Wide Service Area

As defined in ARS §9-463.05 (T)(9), "'Service area' means any specified area within the boundaries of a municipality in which development will be served by necessary public services or facility expansions and within which a substantial nexus exists between the necessary public services or facility expansions and the development being served as prescribed in the infrastructure improvements plan."

While the City's streets and parks and recreational areas development fees are assessed within five separate service areas or benefit districts, fire and police development fees have been and will continue to be assessed on a city-wide basis. This is because unlike streets and parks facilities, which are in fixed locations, there is flexibility in how police and fire services can be allocated throughout the City at any given time, in response to the need. As indicated in the 2007 City of Tucson Impact Fee Study report¹:

- The City delivers fire and police services through fully integrated systems. This means that as needs arise in one area of the city, resources from other areas of the city can be applied to meet the needs.
- Many centralized facilities exist that serve the entire city.
- The fire and police departments already have facility planning procedures in place that consider new growth and the proper timing, placement, and location of new facilities and equipment needed to serve new development.
- Investment in facilities and equipment in one area of the city can impact an area several miles away, by freeing up capacity at another facility.

The City-wide fire service area is shown in Exhibit 1.

¹ City of Tucson Department of Urban Planning and Design, and Departments of Finance and Budget, May 2007

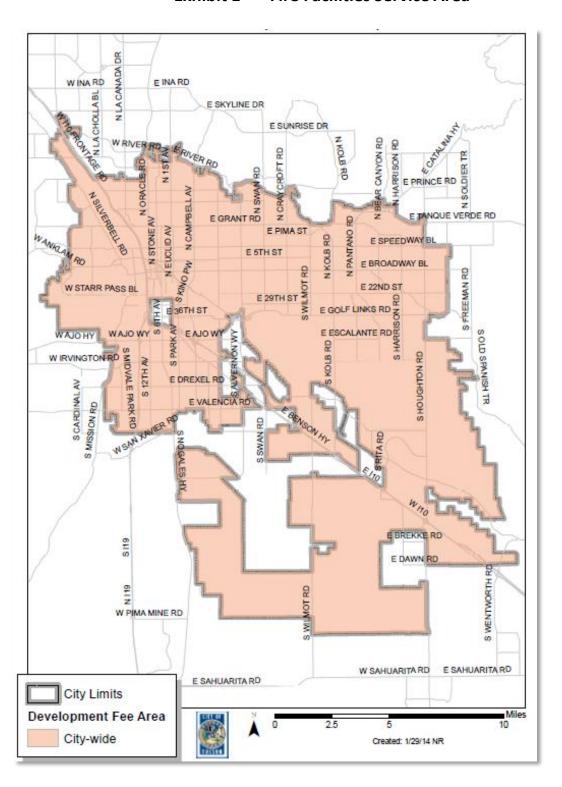


Exhibit 1 Fire Facilities Service Area

Methodology

This study uses an incremental expansion method to calculate the fire facilities development fees, which is the same method as is currently used, i.e., prior to this update. This is a standards-based method in that it establishes the current fire service standard, and applies that standard to projected development to estimate future infrastructure needs.

The value of the service standard is estimated by inventorying existing assets, including buildings, land, vehicles and equipment, and assigning a replacement value to each asset type based on current costs, as determined by City staff and professional judgment. This derived value is then adjusted to account for outstanding debt on existing facilities, the current balance of the development fee account, developer fee credits, and the cost of the fee study. The adjusted value is then applied to the projected new development, as defined in the land use assumptions report, to estimate the future demand for fire services.

There are several advantages to this approach over general standards-based or plan-based methods. Because the fee is based on the existing service provided by the City rather than a specified service standard, the need to calculate existing deficiencies in the level of service provided is eliminated. Secondly, because this method assigns values for specific assets, it more precisely determines the value of the existing level of service. Finally, this method is more flexible than a plan-based method because the fee is based on the existing level of service rather than the estimated cost of proposed elements in the capital plan. This allows the City to more easily amend projects in the IIP to meet changing needs². Key components of the methodology are discussed below.

Proportionate Share, Residential and Non-Residential Development

Both residential and non-residential development generate demand for fire service. Exhibit 2 shows call data from FY 2012-13 based on land use. Discounting the "unclassified" calls, i.e., those for which the originating land use is undetermined, the proportion of calls responded to by the fire department is approximately 73% residential and 27% non-residential.

Residential Fee Rate

It is recommended that the proposed residential fees continue to be assessed on a "dwelling unit" basis rather than on a "square-foot" basis, as is done for the current parks and roads fees. A per-unit or rooftop fee is easier for customers to understand and calculate, and is common practice among other jurisdictions locally and across the state.

² ARS 9-463-05.D.10 states "...a municipality may amend an infrastructure improvements plan adopted pursuant to this section without a public hearing if the amendment addresses only elements of necessary public services in the existing infrastructure improvements plan and the changes to the plan will not, individually or cumulatively with other amendments adopted pursuant to this subsection, increase the level of service in the service area or cause a development fee increase of greater than five per cent when a new or modified development fee is assessed pursuant to this section. The municipality shall provide notice of any such amendment at least thirty days before adoption, shall post the amendment on its website or on the website of an association of cities and towns if the municipality does not have a website and shall provide notice to the advisory committee established pursuant to subsection G of this section that the amendment complies with this subsection."

Uniform Non-Residential Fee Rate

While the City's streets development fee includes different rates for different types of non-residential development (i.e., office, retail, and industrial, based on data published by the Institute for Traffic Engineers) it is more difficult to similarly quantify the demand for fire services based on development type, as detailed data are not readily available. This study assumes the need for fire facilities increases linearly as the built environment expands. A uniform fire facilities fee rate per 1,000 square feet is recommended for all non-residential development, which is also a common practice for fire fees.

Exhibit 2 Calls by Land Use (Residential/Non-Residential)

Land Use	Medical / Rescue	Fire	Other	Total
Non-Residential Calls				
Educational	920	199	68	1,187
Commercial/Office	3,769	458	229	4,456
Industrial, Utility, Defense	101	29	13	143
Institutional	7,697	137	87	7,921
Manufacturing, processing	23	14	11	48
Public Assembly	1,980	173	117	2,270
Warehouse and Storage	<u>340</u>	<u>109</u>	<u>36</u>	<u>485</u>
Subtotal, Nonresidential Calls	14,830	1,119	561	16,510
Residential Calls				
Apartments	559	440	302	1,301
Dormitory Type Residence	245	80	28	353
Hotels, Motels, Inns, Lodges	685	58	31	774
Residential, other	38,769	140	176	39,085
Boarding/Rooming, residential hotels	54	34	13	101
Single- and Two-Family Dwelling	<u>1,797</u>	<u>1,207</u>	<u>976</u>	<u>3,980</u>
Subtotal, Residential Calls	42,109	1,959	1,526	45,594
Total, Classified Calls	56,939	3,078	2,087	62,104
Total Unclassified Calls	14,012	2,170	1,346	17,528
Total Calls (classified and unclassified)	70,951	5,248	3,433	79,632
Percent Residential Calls (classified only) Percent Non-residential Calls (classified	74.0%	63.6%	73.1%	73.4%
only)	26.0%	36.4%	26.9%	26.6%

Data Source: Tucson Fire Department, 2014

■ NECESSARY PUBLIC SERVICES — EXISTING NEEDS

For each necessary public service that is the subject of a development fee, ARS §9-463.05(E) requires that the infrastructure improvements plan include the following:

- "1. A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable."
- "2. An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable."

Facilities Valuation

Exhibits 3 – 5 list the existing City of Tucson fire assets by facility, including buildings and land, vehicles and equipment. The existing value of buildings and land is \$83,985,477 (Exhibit 3). This number includes the following adjustments: 1) the valuation of the Public Safety Academy for Training (PSAT) has been subtracted from the total, as fire and police personnel throughout the City undergo training there, and the statute language explicitly excludes facilities that are used to train firefighters or officers from more than one station or substation; and 2) the line item cost for Station 1, also known as Fire Central, included the relocation from the previous facility. The relocation costs were subtracted from the total, as the statute excludes relocation costs. The value of existing vehicles is \$51,317,507 (Exhibit 4), and the value of existing equipment is \$9,903,590 (Exhibit 5). The estimated cost of the fee study update is \$35,000. The total facilities valuation therefore \$145,241,574:

Total	\$145,241,574
Equipment Fee Study Update	\$ 9,903,590 \$ 35,000
Vehicles	\$ 51,317,507
Buildings and land	\$ 83 <i>,</i> 985 <i>,</i> 477

However, for the purposes of calculating the development fee per service unit, the infrastructure value must be adjusted for credits, as discussed in the section following Exhibit 5.

Exhibit 3 Existing Fire Inventory and Replacement Value – Buildings and Land

	<u>-</u>	Structure			Land					
		Structure		Replacement				Comp		Land
Building	Address	<u>Sq. Ft.</u>	Cost/SF	Cost	<u>Acres</u>	SF/Acre	Total SF	Value/SF		<u>Value</u>
Station 1	300 S. Fire Central Place	64,993	320	20,797,760	3.49	43,560	151,880	\$40.00	\$	6,075,200
Station 3	24 N. Norris Ave.	3,177	320	1,016,640	0.45	43,560	19,680	\$10.00	\$	196,800
Station 4	2100 N. Dragoon St.	9,532	320	3,050,240	1.77	43,560	76,938	\$ 3.50	\$	269,283
Station 5	2835 E. Grant Rd.	7,226	320	2,312,320	1.10	43,560	47,790	\$10.00	\$	477,900
Station 6	10251 S. Wilmot Rd.	7,123	320	2,279,208	2.42	43,560	105,389	\$ 2.50	\$	263,473
PSAT	10251 S. Wilmot Rd.	291,639	320	93,324,497	69.81	43,560	3,040,950	\$ 2.50	\$	7,602,375
Station 7	4902 E. Pima St.	9,238	320	2,956,160	1.50	43,560	65,490	\$10.00	\$	654,900
Station 8	250 W. King Rd.	6,400	320	2,048,000	1.07	43,560	46,613	\$ 5.00	\$	233,065
Station 9	6275 E. Eastland St.	7,756	320	2,481,920	1.25	43,560	<i>54,475</i>	\$ 6.00	\$ \$	326,850
Station 10	797 & 801 E. Ajo Way	6,932	320	2,218,240	1.50	43,560	<i>65,459</i>	\$ 5.00		327,295
Station 11	4075 E. Timrod St.	3,323	320	1,063,360	0.43	43,560	18,900	\$10.00	\$	189,000
Station 12	250 S. Harrison Rd.	3,988	320	1,276,160	0.64	43,560	28,000	\$ 6.00	\$	168,000
Station 13	7975 E. Stella Rd.	3,455	320	1,105,600	3.80	43,560	165,528	\$ 6.00	\$	993,168
Station 14	5757 S. Liberty Ave.	3,832	320	1,226,240	0.52	43,560	22,500	\$ 5.00	\$	112,500
Station 15	2002 S. Mission Rd.	3,676	320	1,176,320	2.26	43,560	98,446	\$ 5.00	\$ \$	492,230
Station 16 Station 17	7575 E. Speedway Bl. 5270 S. Houghton Rd.	8,692 8,921	320 320	2,781,440 2,854,720	2.82 5.10	43,560 43,560	122,857 222, <i>01</i> 2	\$10.00 \$ 2.50	\$	1,228,570 555,030
Station 18	1855 W. Drexel Rd.	1,328	320	424,960	2.00	43,560	87,120	\$ 2.30 \$ 5.00	э \$	435,600
Station 19	9700 Est Esmond Loop	6,728	320	2,152,960	7.82	43,560	340,639	\$ 3.00	φ	936,758
Station 20	4798 N. First Ave.	11,085	320	3,547,200	1.49	43,560	65,000	\$ 8.15	\$ \$	529,750
Station 21	8620 E. Tanque Verde Rd.	11,085	320	3,547,200	2.07	43,560	90,169	\$ 3.61	\$	325,511
Station 22	6810 S. Alvernon Way	15,658	320	5,010,560	7.81	43,560	340,141	\$ 1.24	\$	421,775
Comm. Ctr.	4004 S. Park Ave.	6,800	320	2,176,000	0.57	43,560	24,635	\$ 5.00	\$	123,175
Fire Maint. &		5,555		_,,		10,000	_ :,==	¥ 5155	•	,
Warehouse	720 East Ajo Way	62,964	320	20,148,480	1.45	43,560	63,056	\$ 5.00	\$	315,280
	Totals		_	181,035,200						23,253,487
	PSAT not eligible			93,324,497						7,602,375
	Fire Central reloc., not elig.			14,207,186						5,169,152
	The Contact Toloco, Not ong.			107,531,683					1	2,771,527
	Eligible Cost/Value		-	73,503,517					1	0,481,960
Total Land ar	nd Building			\$ 83,985,477						

Exhibit 4 Existing Fire Inventory and Replacement Value – Vehicles

\$ 51,317,507

<u>Vehicle</u>	<u># of</u> <u>Units</u>	<u>Unit</u> Cost	Total Replacement Cost
Ambulance	33	\$ 250,000	\$ 8,250,000
Car Fire Prevention	5	\$ 20,798	\$ 103,991
Fork Lift	1	\$ 24,570	\$ 24,570
Ladder Platform	2	\$ 1,500,000	\$ 3,000,000
Ladder Tender	9	\$ 250,000	\$ 2,250,000
Ladder Truck	11	\$ 750,000	\$ 8,250,000
Marked Cars	13	\$ 38,000	\$ 494,000
Pumper Unit	41	\$ 580,000	\$23,780,000
Specialty Vehicle	5	\$ 314,840	\$ 1,574,199
Support Vehicle	18	\$ 26,928	\$ 484,708
Truck Air Power	1	\$ 261,337	\$ 261,337
Truck Brush	2	\$ 56,529	\$ 113,058
Truck Command	9	\$ 57,914	\$ 521,229
Truck Fire Prevention	40	\$ 17,236	\$ 689,423
Truck Haz Mat	2	\$ 450,000	\$ 900,000
Truck Haz Mat-Waste			
Recovery	1	\$ 59,089	\$ 59,089
Truck Mass Medical	1	\$ 142,705	\$ 142,705
Truck Rescue	9	\$ 25,187	\$ 226,686
Water Tender	1	\$ 192,512	\$ 192,512

Total

Exhibit 5 Existing Fire Inventory and Replacement Value – Equipment

<u>Equipment</u>	<u># of</u> Units	<u>Unit</u> Cost	<u>T</u>	otal Replacement Cost
Air Compressor	10	\$ 53,000	\$	530,000
Cardiac Monitor	42	\$ 25,000	\$	1,050,000
Communication Equipment	8	\$ 180,509	\$	1,444,072
Computer	2	\$ 18,910	\$	37,819
Haz Mat Decon	1	\$ 28,252	\$	28,252
Haz Mat Meter	5	\$ 8,107	\$	40,537
Haz Mat Meter Radiation	8	\$ 8,163	\$	65,302
Jaws of Life	105	\$ 7,059	\$	741,183
Lap Tops- Emergency Communication (many units, 2				
Capital Projects)	2	\$ 1,782,822	\$	3,565,645
Office Equipment	12	\$ 13,075	\$	156,898
Phone System	4	\$ 32,056	\$	128,225
Pulse Ox Meter	10	\$ 7,000	\$	70,000
Safety Trailer	1	\$ 63,186	\$	63,186
Scrubber Sweeper	1	\$ 62,240	\$	62,240
Specialty Equipment	32	\$ 19,394	\$	620,607
Staffing Software	1	\$ 112,362	\$	112,362
Station Traffic Control	2	\$ 24,970	\$	49,940
Stove	1	\$ 10,060	\$	10,060
Thermal Imager	47	\$ 13,162	\$	618,599
Trailer	7	\$ 12,745	\$	89,213
Training Prop	9	\$ 19,857	\$	178,711
Vehicle Maint. Equipment	7	\$ 18,283	\$	127,980
Video Equipment	7	\$ 16,108	\$	112,759
Total			\$	9,903,590

Credit – Adjusted Facilities Valuation

Credit is given for outstanding debt on existing facilities, because new development will help repay this debt. This includes \$13,502,185 in outstanding debt on 1994 and 2000 Bonds. Credit is also given for \$4,321,675 (in current dollars) for federal grants used to purchase fire equipment, because this represents outside funding, i.e., City residents didn't pay for these facilities. Finally, credit is given for the balance of funds in the fee account, which is \$2,321,000. The total credit is \$20,144,860:

CREDITS

Total Credits	\$20,144,860
Fee fund balance (as of 3/31/14)	\$ 2,321,000
Federal grants , equipment	\$ 4,321,675
Outstanding debt, existing facilities	\$13,502,185

Net Facilities Valuation

Exhibit 6 shows the net fire facilities valuation, which is **\$125,096,714**. This includes the total facilities valuation of \$145,241,574 minus the total credits of \$20,144,860.

Net Facilities Valuation – Exhibit 6

Buildings and land	\$ 83,985,477
Vehicles	\$ 51,317,507
Equipment	\$ 9,903,590
Fee Study Update	\$ 35,000
Subtotal	\$ 145,241,574
Credit – outstanding debt	(\$ 13,502,185)
Credit – federal grants	(\$ 4,321,675)
Credit – fee fund balance	(\$2,321,000)
Subtotal	(\$20,144,860)
Net Facilities Valuation, 2014	\$125,096,714

■ FIRE SERVICE COST PER UNIT

ARS §9-463.05(E)(4) requires that the infrastructure improvements plan include "A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial."

The Fire Facilities unit costs, for residential and non-residential land uses, are shown in Exhibit 7, and are calculated as follows. The socioeconomic data were provided by the Pima Association of Governments, and are consistent with the data in the Land Use Assumptions report.

For residential development, the net value of the fire facilities is multiplied by the proportion of calls from residential uses (73% or 0.73). This value is divided by the 2014 population of Tucson (529,962) to get a per capita cost of \$172.32. The per capita cost is then multiplied by the average number of persons per single family residential unit (2.8 persons/household) to get the cost per single family unit, i.e., the fire facility cost for one service unit or SU (\$483). The \$483 cost or net value per SU established in Exhibit 7 is the "specific level of use" that is used as the basis for the level of service for future development. Similarly, the cost per Condo/Attached unit is the per capita cost multiplied by 1.9 persons per household, which yields \$327.40, while the cost per MFR/Apartment/Mobile Home is the per capita cost multiplied by 1.7 persons per household, which yields \$292.94.

Similarly, for non-residential development, the net value of the fire facilities is multiplied by the proportion of calls from non-residential uses (27% or 0.27). This value is divided by the total existing non-residential building area in 1000s of square feet (216,776) to get a **cost per 1000 square feet of non-residential building area, or \$156**. This number is then divided by the fee per residential SU (\$483) to get the fire SU multiplier per 1000 square feet of non-residential development (0.32, see Exhibit 7).

Exhibit 7 Cost per Unit: Residential and Non-Residential Uses

RESIDENTIAL FEES, PER UNIT

Net Facilities Value	\$ 125,096,714
Multiply by residential percentage	0.73
Equals residential share	\$ 91,320,601
Divide by Tucson 2014 population	529,962
Equals Residential Cost Per Person	\$ 172.32
SFR fee (also fee per one SU) – multiply per capital fee by 2.8 persons per household	\$ 482.48
Condo/Attached Dwelling Unit fee – multiply per capita fee by 1.9 persons per household	\$ 327.40
MFR/Apartment/Mobile Home fee – multiply per capital fee by 1.7 persons per household	\$ 292.94

NON-RESIDENTIAL FEES, PER 1000 SQ. FT.

Net Facilities Value	\$ 125,096,714
Multiply by non-residential percentage	0.27
Equals non-residential share , rounded	\$ 33,776,113
Divide by total existing nonresidential square	
footage, per 1000 sq. ft.	216,776
Equals non-residential fee per 1000 sq. ft.	0.1558
Non-residential fee: Cost Per 1,000 sq. ft. non-	
residential use	\$ 155.80
Divide by fee per residential SU to get SU per 1000	
SF non-residential use	0.32

Exhibit 8 shows the existing (2011) fees, prior to this update, and the current (proposed) fees, rounded to the nearest dollar. The changes in residential fees are due to a combination of the increased net facility valuation and changes in the residential multipliers used. The change in the non-residential fee is due to the increased net facility valuation, which tends to increase the fee, and the comparatively greater increase in non-residential square footage, which tends to decrease the fee.

EXHIBIT 8 EXISTING AND PROPOSED DEVELOPMENT FEES

Land Use	Existing Fees	Current (Proposed) Fees	Change
SFR	\$357	<mark>\$483</mark>	\$126
Condo/Attached Unit	\$357	<mark>\$327</mark>	(\$30)
MFR, Apartment	\$263	<mark>\$293</mark>	\$30
Mobile Home	\$357	<mark>\$293</mark>	(\$64)
Non-Residential Uses,	\$196	<mark>\$156</mark>	(\$40)
per 1000 Sq. Ft.			

■ ESTIMATED FEE COLLECTION, 2014 - 2024

The unit costs are applied to the projected new development, i.e., the projected number of new units of residential and non-residential development, to estimate the fire facility fees that will be collected over the 10-year planning period. The projected amount of new development is from the Land Use Assumptions report. Exhibit 9 shows that the total projected fire development fee revenues are \$18,490,787 for the ten-year period 2014 – 2024, based on the projected number of residential and non-residential units of new development.

EXHIBIT 9 – PROJECTED FIRE FEE REVENUES, 2014 – 2024
PROJECTED NUMBER OF NEW UNITS

Land Use	SFR	Condo/Attached Unit	MFR/Apartment/ Mobile Home	Non-Residential Use, per 1000 Sq. Ft.		
Project # of new units, 2014 - 2024	18,373	3,928	8,255	38,007		
Fee per unit, Proposed	\$482.48	\$327.40	\$292.94	\$155.81		
Proposed fee per unit, rounded	\$483	\$327	\$293	\$156		
Estimated fees, 2014 - 2024	\$8,864,661	\$1,286,024	\$2,418,188	\$5,921,914		
Total Residential Fees						
Total Non- Residential Fees	\$5,921,914					
Total Fees \$18,490,787						

Exhibit 10 shows the projected fee revenues based on the projected number of new **service units**, which total \$18,490,011. The difference between the projected fees calculated in Exhibits 9 and 10 is due to rounding in the calculations. The number of new service units in Exhibit 10 is obtained by multiplying the projected number of new units by the service unit multiplier for each land use category (see Exhibit 11).

EXHIBIT 10 – PROJECTED FIRE FEE REVENUES, 2014 – 2024 PROJECTED NUMBER OF NEW SERVICE UNITS (SUs)

Land Use	SFR	Condo/Attached Unit	MFR/Apartment/ Mobile Home	Non-Residential Use, per 1000 Sq. Ft.		
Projected # of new SUs, 2014 - 2024	18,373 = (18,373 x 1.0)	2,666 = (3,928 x 0.6786)	5,012 = (8,255 x 0.6071)	12,272 = (38,007 x 0.3229)		
Fee per SU, Proposed	\$482.48	\$482.48	\$482.48	\$482.48		
Estimated fees, 2014 – 2024	\$8,864,661	\$1,286,078	\$2,418,017	\$5,921,254		
Total Residential Fees						
Total Non- Residential Fees	\$5,921,254					
Total Fees		\$18,490,011				

EXHIBIT 11 – FIRE SERVICE UNIT MULITPLIERS

		Residential Multipliers
Residential Land Use	Avg. Household Size	
SFR detached	2.8	2.8/2.8 = 1.0
Condo/Attached Unit	1.9	1.9/2.8 = 0.6786
MFR/Apartment/Mobile	1.7	1.7/2.8 = 0.6071
Home		
		Non-Residential Multiplier
Fee per 1000 sq. ft.	Fee per SFR =	
Non-residential use =	\$482.48	\$155.81/\$482.48 = 0.3229
\$155.81		

■ NECESSARY PUBLIC SERVICES - NEW DEVELOPMENT

As required in ARS §9-463.05(E), the infrastructure improvements plan shall include, "A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved land use assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable."

Page | 14

The fire department has provided a 10-year unmet needs list with development fee eligible projects (see Exhibit 12). The Emergency Communications Center expansion, which has been funded jointly by Police and Fire, is nearly completed; only the remaining cost is shown. Exhibit 12 indicates a total of \$22,903,300 in fire service facility needs for 2014 – 2024.

This section highlights the greater flexibility afforded by the incremental expansion method of determining the existing level of service and per service unit fee because a change in the list of necessary public services needed to serve new development will not cause a change in the value of the level of service (net facilities value) established in Exhibit 7 or the resultant development fee.

Exhibit 12 Ten-Year Capital Improvement Plan, Development Fees - Fire

Project Name	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Equipment for New Station											
Northwest Engine with equipment				\$ 730,000							\$ 730,000
Northwest Ladder with equipment				\$1,670,000							\$ 1,670,000
Northwest Paramedic with equipment				\$ 330,000							\$ 330,000
Southeast Engine with equipment						\$ 730,000					\$ 730,000
Southeast Ladder with equipment						\$1,670,000					\$ 1,670,000
Southeast Paramedic with equipment						\$ 330,000					\$ 330,000
Special Resource Station Mobil Air Support							\$ 150,000				\$ 150,000
Special Resource Station Command Vehicle							\$ 400,000				\$ 400,000
Special Resource Station Resource Unit							\$ 350,000				\$ 350,000
Special Resource Station Rehab Unit							\$ 200,000				\$ 200,000
Total Equipment for New Station	\$ -	\$ -	\$ -	\$2,730,000	\$ -	\$2,730,000	\$ 1,100,000	\$ -	\$ -	\$ -	\$ 6,560,000
New Station and Land											
Station Capacity Expansion - Station 14		\$920,000									\$ 920,000
Station Capacity Expansion - Station 18			\$ 920,000								\$ 920,000
New Northwest Station-Land			\$ 600,000								\$ 600,000
New Northwest Station-Bldg				\$3,308,000	\$ 1,000,000						\$ 4,308,000
New Southeast Station-Land				\$ 600,000							\$ 600,000
New Southeast Station-Bldg					\$ 3,308,000	\$1,000,000					\$ 4,308,000
New Special Resource Station-Bldg							\$ 3,000,000				\$ 3,000,000
Total New Station and Land	\$ -	\$920,000	\$ 1,520,000	\$3,908,000	\$ 4,308,000	\$1,000,000	\$ 3,000,000	\$ -	\$ -	\$ -	\$14,656,000
Communications Center Fire Only (Joint											
Project TFD/TPD)											
Communications Center (Fire Portion-new	4 4 007 000										A 4 007 000
fees)	\$ 1,687,300			Φ		•			•		\$ 1,687,300
Total Communications Center	\$ 1,687,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,687,300
TOTAL	\$ 1,687,300	\$920,000	\$ 1,520,000	\$6,638,000	\$ 4,308,000	\$3,730,000	\$ 4,100,000	\$ -	\$ -	\$ -	\$22,903,300

■ PROJECTED REVENUES AND COSTS, 2014 – 2024

The projected revenues and costs are summarized in Exhibit 13. Because the target Fire level of service is calculated as a per service unit value, the projected fire service needs can be calculated by simply multiplying the sum of the number of new residential and non-residential **service units** (26,050 + 12,272 = 38,323 SUs) by the \$482.48 fee per service unit (see Exhibit 10). The result is the projected revenue from fees for the 10-year planning period. It is expected that these funds will be available for applicable fire service improvement projects from 2014-2024. The fee fund balance is added to the projected revenues to get the projected available funds over the ten-year period, \$20,715,409. The difference between projected costs and available funding is (\$2,187,891). In other words, the projected costs exceed projected available funds by \$2,187,891.

Exhibit 13 Projected Revenues and Costs, 2014-2024

New SUs	Fee/SU	Projected Revenue 2014-2024	Current Fee Fund Balance	Available Funds, 2014-2024	Planned Costs	% of Planned Costs
38,323	\$482.48	\$18,490,011	\$2,225,398	\$20,715,409	\$22,903,300	90

■ REVENUE CONSIDERATIONS

Fire development fee revenues will be used to purchase new vehicles and equipment and to build new or expand existing fire stations and facilities, in accordance with statutory provisions. Projected average annual revenues based on fees set at this level would be approximately \$1.85 million per year. This projection is based on the average number of units expected to be built annually over the next 10 years. It is important to keep in mind that this is only an estimate, and revenues will be a function of actual development, which is dictated primarily by market conditions.

APPENDIX

List of Preparers

Curtis Lueck & Associates

Curtis C. Lueck, P.E., Ph.D. Marcos U. Esparza, P.E.

Panel on Fire Infrastructure

City of Tucson
Office of Integrated Planning

Nicole Ewing-Gavin, AICP, Director Lynne Birkinbine, Infrastructure Planning Manager Joanne Hershenhorn, Project Coordinator and Co-Author

Fire Department

Jim Critchley, Fire Chief Joe Gulotta, Assistant Fire Chief Stacie Bird, Finance Manager